

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,045	06/28/2001	Hiroshi Kawaguchi	SONYJP 3.0-186	5505
7590 09/20/2004				
LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP		EXAMINER		
600 SOUTH AVENUE WEST		WANG, ALBERT C		
WESTFIELD, NJ 07090-1497				
		ART UNIT	PAPER NUMBER	
		2115		

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/894,045

Applicant(s)

KAWAGUCHI, HIROSHI

Examiner

Albert Wang

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 13-17 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 5, 12 and 18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Original claims 1-21 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-11, 13-17, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa et al., U.S. Patent No. 6,526,516 ("Ishikawa").

As per claim 1, Ishikawa teaches a method for transmitting data among a plurality of devices connected to a network under control of a controller (Fig. 8, group 2 devices under controller 1; Figs. 16 & 24), the method comprising:

transmitting from each of the plurality of devices in the network suspend state data indicating whether the transmitting device can be set in a suspend state (Col. 11, line 62 – col. 12, line 24, each device sends status signal indicating whether mode transition is or is not possible); and

receiving the suspend state data in the controller (Fig. 11, step S405).

However, Ishikawa does not expressly teach the transmitting step using a broadcast communications transmission interval. Ishikawa does teach combining transfer modes to maintain real-time transfer using a broadcast communications transmission interval (Fig. 35, nominal cycle period allows for both asynchronous and isochronous packets; Col. 24, line 48 – col. 25, line 13, nominal cycle period is for broadcasting). At the time of the invention, it would

Art Unit: 2115

have been obvious to one of ordinary skill in the art to apply combining transfer modes to the transmitting step, in order to maintain real-time transfers.

As per claim 2, Ishikawa teaches the transmitting step includes transmitting the suspend state data when a state of whether the transmitting device can be set in the suspend state is changed (Fig. 11; Col. 11, line 62 – col. 12, line 24).

As per claim 3, Ishikawa teaches the transmitting step includes transmitting the suspend state data regularly almost at predetermined time intervals (Col. 26, lines 3-12).

As per claim 4, Ishikawa teaches the suspend state data includes data on suspend state setting priorities (Col. 10, line 55 – col. 11, line 2).

As per claims 6 and 7, Ishikawa teaches the claimed determining step and sending step (Fig. 11).

As per claim 8, Ishikawa teaches a transmission system, comprising:

a plurality of devices connected to a network so that said plurality of devices can transmit data to one another, said plurality of devices including a first device and a second device (Fig. 8, controller 1 is second device; Figs. 16 & 24);

said first device including:

a memory for holding suspend state data indicating whether each of said plurality of devices can be set in a suspend state (Fig. 18, memory; Col. 11, line 62 – col. 12, line 24, each device sends status signal indicating whether mode transition is or is not possible); and

Art Unit: 2115

an output unit operable to output said suspend state data (Col. 19, lines 20-24, each device has a transceiver; Fig. 17, hardware unit); and
said second device including:

a receiver operable to receive said suspend state data output to said network (Col. 19, lines 20-24, transceiver; Fig. 17, hardware unit; Fig. 11, step S405); and

a controller operable to determine whether said first device can be set in said suspend state based on said suspend state data received by said receiver, and to control said first device based on said determination (Col. 11, line 62 – col. 12, line 24; Fig. 11).

However, Ishikawa does not expressly teach outputting said suspend data to a broadcast communications transmission interval. Ishikawa does teach combining transfer modes to maintain real-time transfer using a broadcast communications transmission interval (Fig. 35, nominal cycle period allows for both asynchronous and isochronous packets; Col. 24, line 48 – col. 25, line 13, nominal cycle period is for broadcasting). At the time of the invention, it would have been obvious to one of ordinary skill in the art to apply combining transfer modes to outputting said suspend data, in order to maintain real-time transfers.

As per claims 9-11 and 13, since Ishikawa teaches the method of claims 2-4, 6 and 7, and the system of claim 8, Ishikawa teaches the claimed system.

As per claim 14, Ishikawa teaches a transmission apparatus connected to a network (Figs. 8, 16 & 24), comprising:

Art Unit: 2115

a memory operable to hold suspend state data indicating whether said transmission apparatus can be set in a suspend state (Fig. 18, memory; Col. 11, line 62 – col. 12, line 24, each device sends status signal indicating whether mode transition is or is not possible); and

an output unit operable to output said suspend state data held by said memory (Col. 19, lines 20-24, each device has a transceiver; Fig. 17, hardware unit).

However, Ishikawa does not expressly teach outputting said suspend data to a broadcast communications transmission interval. Ishikawa does teach combining transfer modes to maintain real-time transfer using a broadcast communications transmission interval (Fig. 35, nominal cycle period allows for both asynchronous and isochronous packets; Col. 24, line 48 – col. 25, line 13, nominal cycle period is for broadcasting). At the time of the invention, it would have been obvious to one of ordinary skill in the art to apply combining transfer modes to outputting said suspend data, in order to maintain real-time transfers.

As per claims 15-17, since Ishikawa teaches the method of claims 2-4, 6 and 7, and the apparatus of claim 14, Ishikawa teaches the claimed apparatus.

As per claim 19, Ishikawa teaches a transmission control apparatus for controlling transmission among a plurality of devices in a network, the plurality of devices being mutually connected in a data transmittable state (Figs. 8, 16 & 24), said transmission control apparatus comprising:

a receiver operable to receive suspend state data, said suspend state data indicating whether each of the plurality of devices can be set in a suspend state (Col. 19, lines 20-24,

Art Unit: 2115

transceiver; Fig. 17, hardware unit; Col. 11, line 62 – col. 12, line 24, each device sends status signal indicating whether mode transition is or is not possible; Fig. 11);

a controller operable to determine whether each of the plurality of devices in the network can be set in said suspend state based on said suspend state data received by said receiver, and to generate a command for controlling a state of each of said plurality of devices based on said determination (Fig. 17, firmware unit; Col. 11, line 62 – col. 12, line 24; Fig. 11); and

a transmitter operable to transmit said commands to the network (Col. 19, lines 20-24, transceiver; Fig. 17, hardware unit).

However, Ishikawa does not expressly teach transmitting said suspend data to a broadcast communications transmission interval. Ishikawa does teach combining transfer modes to maintain real-time transfer using a broadcast communications transmission interval (Fig. 35, nominal cycle period allows for both asynchronous and isochronous packets; Col. 24, line 48 – col. 25, line 13, nominal cycle period is for broadcasting). At the time of the invention, it would have been obvious to one of ordinary skill in the art to apply combining transfer modes to transmitting said suspend data, in order to maintain real-time transfers.

As per claims 20 and 21, since Ishikawa teaches the method of claims 2-4, 6 and 7, and the apparatus of claim 19, Ishikawa teaches the claimed apparatus.

Allowable Subject Matter

3. Claims 5, 12, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2115

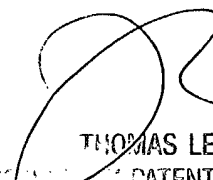
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert Wang whose telephone number is 703-305-5385 (571-272-3669 after moving in October). The examiner can normally be reached on M-F (9:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 703-305-9717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

aw
September 13, 2004


THOMAS LEE
SENIOR PATENT EXAMINER
TECHNOLOGY CENTER 2100